EFFECTS OF PARTNER VIOLENCE ON ADHERENCE TO HIV CARE AND TREATMENT MARKERS AMONG WOMEN IN BALTIMORE CITY

Jocelyn C. Anderson, MSN, RN, FNE-A
Nancy Glass, PhD, RN, FAAN
Jacquelyn Campbell, PhD, RN, FAAN
ACKNOWLEDGEMENTS

- Funding for this work has come from NICHD T32HD064428, NIMH F31MH100995 and Sigma Theta Tau Nu Beta Chapter.

DISCLAIMER

- The opinions, findings, conclusion, and recommendations expressed are those of the authors and do not necessarily reflect the view of the funders.
BACKGROUND

- USAID estimated 34 million people infected with HIV worldwide and more than 2.5 million new infections occurring each year\(^1\)
- Approximately 1 in 3 women has experienced lifetime physical, sexual or stalking violence from a partner\(^2\)
- IPV has been linked to negative physical and mental health outcomes, including HIV and other STIs\(^3-5\)
- Recent works have looked at pathways to HIV acquisition and disease progression in the setting of IPV or VAW\(^6-8\)
- Limited work linking IPV to objective, biologic health outcomes – esp. in persons living with HIV
CAMPBELL ET AL., 2013
PURPOSE

- To examine the prevalence of IPV associations between IPV and physical and mental health outcomes of women living with HIV.
SETTING

- Johns Hopkins Moore Clinic for HIV Care
  - Urban HIV specialty clinic in Baltimore, MD
  - ~2600 patients (~40% female)
  - ~75% African American
  - Average age: 48

- Previous estimate of past year IPV: 26%
  - 3 question PVS - physical violence or feeling unsafe from current/previous partner (Illangasekare et al., 2012)
## Eligibility Criteria

<table>
<thead>
<tr>
<th>Inclusion Criteria:</th>
<th>Exclusion Criteria:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Female</td>
<td>• Inability to participate due to emergent need for medical care</td>
</tr>
<tr>
<td>• Age ≥18</td>
<td></td>
</tr>
<tr>
<td>• Diagnosed with HIV infection and receiving care in the Moore Clinic for 1 year</td>
<td></td>
</tr>
<tr>
<td>prior to enrollment</td>
<td></td>
</tr>
<tr>
<td>• Able to speak and read English</td>
<td></td>
</tr>
<tr>
<td>• Able and willing to provide informed consent</td>
<td></td>
</tr>
</tbody>
</table>
MEASURES: SELF-REPORT SURVEY

- IPV (past year) using Abuse Assessment Screen (AAS) and Severity of Violence Against Women Scale (SVAWS)
  - Any yes on AAS
    - Includes psychological/physical/sexual violence
  - Any yes to severe physical violence or sexual violence item on SVAWS
- Center for Epidemiologic Studies - Depression
  - Cut-off score 16 or greater
- PTSD Checklist - Civilian
  - Cut-off score 45 or greater
MEASURES: MEDICAL RECORDS REVIEW

- CD4 Count (most recent on or prior to date of survey)
- Viral load (most recent on or prior to date of survey)
- Total scheduled visits (past year)
- Total missed visits (past year)
DATA COLLECTION

- Self-administered tablet computer-based surveys
- As of 9/1/15:
  - 169 participants with completed survey and medical record data
# Demographics (n=169)

<table>
<thead>
<tr>
<th></th>
<th>IPV+ (n=96)</th>
<th>IPV- (n=73)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age [mean, (SD)]</strong></td>
<td>49 (8.3)</td>
<td>50 (8.8)</td>
<td>0.59</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black/African-American</td>
<td>88 (93)</td>
<td>64 (88)</td>
<td>0.33</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>3 (3)</td>
<td>3 (4)</td>
<td></td>
</tr>
<tr>
<td>Native American/Alaskan Indian</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td></td>
</tr>
<tr>
<td>Other/Multiple</td>
<td>3 (3)</td>
<td>6 (8)</td>
<td></td>
</tr>
<tr>
<td><strong>Education (at least HS diploma/GED)</strong></td>
<td>83 (87)</td>
<td>68 (93)</td>
<td>0.16</td>
</tr>
<tr>
<td><strong>Employed</strong></td>
<td>5 (5)</td>
<td>7 (10)</td>
<td>0.28</td>
</tr>
<tr>
<td><strong>Public Insurance</strong></td>
<td>94 (98)</td>
<td>71 (97)</td>
<td>0.78</td>
</tr>
<tr>
<td><strong>Children Under 18</strong></td>
<td>20 (21)</td>
<td>10 (14)</td>
<td>0.23</td>
</tr>
<tr>
<td><strong>Most recent partner male</strong></td>
<td>89 (93)</td>
<td>71 (97)</td>
<td>0.19</td>
</tr>
</tbody>
</table>
IPV Prevalence (Past Year)

- 57% reported any type IPV
- 24% reported sexual IPV
- 21% reported being strangled ("choked") by their partner during their lifetime

Among women reporting IPV:
- Mean DA Score = 9.4
- 24% scored in the severe or extreme danger categories (DA Score >14)
MENTAL HEALTH

- Overall:
  - 23% + for PTSD symptoms
  - 27% + for depressive symptoms

<table>
<thead>
<tr>
<th>n (%)</th>
<th>IPV+ (n=96)</th>
<th>IPV- (n=72)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD</td>
<td>28 (29)</td>
<td>11 (15)</td>
<td>0.04</td>
</tr>
<tr>
<td>Depression</td>
<td>33 (35)</td>
<td>13 (18)</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Frequency of Mental Health Symptoms by IPV Status

- PTSD: 29% (n=28) vs 15% (n=11), p=0.04
- Depression: 33% (n=33) vs 18% (n=13), p=0.02
PAST YEAR CLINIC VISITS

Scheduled clinic visits:
  Range: 1-358
  Mean (SD): 36.2 (38.3)
  Median (IQR): 28 (18-42.5)

Missed clinic visits:
  Range: 0-83
  Mean (SD): 10.6 (11.3)
  Median (IQR): 8 (4-13)

*Visit totals include daily medication visits for participants in JHMI-based methadone/suboxone programs
Past Year Clinic Visits

Mean Clinic Visits by IPV Status

- Mean # of Sch. Visits: IPV+ 37, IPV- 35
- Mean # of Missed Visits: IPV+ 11, IPV- 10
- Mean % of Missed Visits: IPV+ 32, IPV- 31
HIV Treatment Markers

- **Overall:**
  - 10% with CD4<200
  - 32% with VL>20

<table>
<thead>
<tr>
<th>n (%)</th>
<th>IPV+ (n=96)</th>
<th>IPV- (n=72)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD4 Count &lt;200</td>
<td>13 (13)</td>
<td>3 (4)</td>
<td>0.04</td>
</tr>
<tr>
<td>Viral load &gt;20</td>
<td>35 (37)</td>
<td>19 (26)</td>
<td>0.15</td>
</tr>
</tbody>
</table>

Frequency of HIV Treatment Markers by IPV Status

[Graph showing frequency of HIV treatment markers by IPV status]
IMPLICATIONS FOR PROVIDERS

- Assessment for current and past IPV is imperative in this patient population
- Inclusion of IPV specific resources in community resources/referrals provided to patients (DV hotlines, shelter, law enforcement, forensic nursing, legal assistance)
  - Assessment and referrals should be tailored to patient
  - Ongoing, flexible and accessible
- Assessment and treatment for co-occurring mental health symptoms/disorders
IMPLICATIONS FOR RESEARCH

- Examine biologic chronic stress models as a mechanism for poorer CD4 counts among abused women
- Evaluate interventions for addressing violence in women living with HIV
  - Improving safety (assessment, referral, resources, safety planning)
  - Improving health (adherence interventions - long acting medications)
  - Providers knowledge/skill (partnerships with IPV providers, use of technologies that eliminate provider variance)
CONCLUSIONS

- High rates of IPV among women living with HIV
- Women who experienced IPV more likely to have negative physical and mental health markers
  - Despite having clinic attendance that was comparable to those who had not
  - Perhaps related to poor adherence to medications, although VL differences were not significant at this point in the analysis
THANK YOU!
QUESTIONS?

Jocelyn Anderson
jocelyna@jhu.edu
REFERENCES